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Glycemic Index and Glycemic Load

Maintaining healthy blood sugar levels is very important for your overall health. Diabetes, prediabetes or insulin resistance, hypertension, heart disease, and many other chronic conditions are caused or worsened by poor blood sugar control. Not all foods have the same impact on blood sugar and insulin. The Glycemic Index (GI) and Glycemic Load (GL) are two concepts that can help you select foods for optimal blood sugar balance.

The **Glycemic Index (GI)** is a way to measure the impact of a specific food on blood sugar levels. The GI ranks carbohydrate-containing foods on a scale of 0 to 100 based on how quickly the foods raise blood sugar levels. The GI is a score of a food's impact on blood sugar measured in laboratory studies when a specific portion size was eaten. The GI score of a food can vary depending on the food's size, ripeness, storing method, and preparation method.

The **Glycemic Load (GL)** is calculated by multiplying a food's GI (as a percentage) by the number of grams of carbohydrates in a serving size. The result is a score of how much that serving of food is likely to increase blood sugar levels. GL takes into account the GI score and the portion size that is eaten.

Generally speaking, eating appropriate portions of foods lower in both GI and GL helps to stabilize blood sugar throughout the day. The ranges for low, medium, and high GI and GL are shown in the table below.

	Low	Medium	High
Glycemic Index	55 or less	59–69	70 or higher
Glycemic Load	10 or less	11–19	20 or higher

Tips for Blood Sugar Balance:

- While low GI foods are excellent choices, most people also eat some medium GI foods. One important tip to remember is that **medium and high GI foods should be eaten with protein or fat**, in order to soften the effect of these foods on your blood sugar level. High GI foods are not recommended on a daily basis, as eating these frequently can result in blood sugar imbalances.

- GI refers to the increase in blood sugar for a defined portion of a specific food. It does not take into account the actual portion of these foods eaten in real life. For example, watermelon is considered to be high GI, but the average person eats a slice or two; therefore, the actual glycemic impact of watermelon is low and not concerning.
- There may be differences between how different individuals' blood sugar responds to low, medium, or high GI foods. For example, a relatively active person who does not have diabetes may experience a small increase in the blood sugar when a low GI food is eaten. In contrast, someone with prediabetes may experience comparatively higher blood sugars with the same low GI food. **Checking your glucose levels regularly is the best way to figure out how specific foods affect your blood sugar.**
- There are other factors that can affect your blood sugar after a meal, like meal timing and physical activity. For example, a carbohydrate-rich meal eaten late at night may result in a higher blood sugar when compared to the same meal eaten in the morning. In contrast, going for a walk shortly after eating may soften how much your blood sugar rises after a meal.

Glycemic Index and Glycemic Load in the IFM Food Plans

Foods included in the Proteins, Nuts & Seeds, Fats & Oils, Non-Starchy Vegetables, and the Beverages, Spices, and Condiments categories have none or a very small amount of carbohydrate.

Foods included in the Whole Grains, Legumes, Dairy and Alternatives, Starchy Vegetables, and Fruits categories contain a higher amount of carbohydrate.

All foods in IFM's Food Plans are low to medium GI and GL at the listed serving sizes.

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